Develop of Software User Interface to Support Scenario Modeling of Astronaut Schedules to Aid in the Selection of Fatigue Countermeasures within Behavioral Health and Performance Dashboard (BHP-DS)

Completed Technology Project (2013 - 2014)

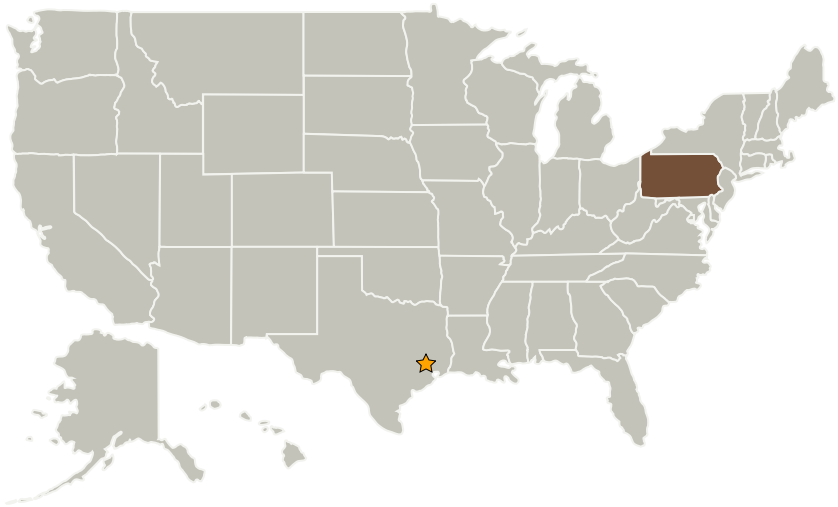
Project Introduction

We accomplished all stated objectives of this one-year project: (1) Develop engineering requirements for a software module and user interface to scenario modeling of astronaut schedules within the BHP-DS; (2) Develop user interface mockups; (3) Implement the software within the BHP-DS platform; (4) Develop a blueprint for future development.

Anticipated Benefits

The core technology for BHP-DS meets a compelling commercial need in the field of medical care delivery on Earth. BHP-DS will enable tracking of patient time series data in the context of factors that affect patient health and treatment. It will enhance the efficiency and effectiveness of medical care that is delivered remotely (e.g., rural areas, specialists serving a nation-wide patient base) and a medical care delivery care paradigm that involves one to many (single physician providing medical monitoring to large number of patients).

Primary U.S. Work Locations and Key Partners



Develop of Software User Interface to Support Scenario Modeling of Astronaut Schedules to Aid in the Selection of Fatigue Countermeasures within Behavioral Health and Performance Dashboard

Table of Contents

Project Introduction	1
Anticipated Benefits	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Stories	2
Project Website:	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

Human Spaceflight Capabilities

Develop of Software User Interface to Support Scenario Modeling of Astronaut Schedules to Aid in the Selection of Fatigue Countermeasures within Behavioral Health and Performance Dashboard (BHP-DS)

Completed Technology Project (2013 - 2014)

Organizations Performing Work	Role	Type	Location
★Johnson Space Center(JSC)	Lead Organization	NASA Center	Houston, Texas
Pulsar Informatics Inc	Supporting Organization	Industry	

Primary U.S. Work Locations
Pennsylvania

Project Transitions

November 2013: Project Start

October 2014: Closed out

Closeout Summary: We accomplished all stated objectives of this one-year project: (1) Develop engineering requirements for a software module and user interface to scenario modeling of astronaut schedules within the BHP-DS; (2) Develop user interface mockups; (3) Implement the software within the BHP-DS platform; (4) Develop a blueprint for future development.

Stories

Abstracts for Journals and Proceedings
(https://techport.nasa.gov/file/25012)

Project Website:

https://taskbook.nasaprs.com

Organizational Responsibility

Responsible Mission Directorate:

Space Operations Mission Directorate (SOMD)

Lead Center / Facility:

Johnson Space Center (JSC)

Responsible Program:

Human Spaceflight Capabilities

Project Management

Program Director:

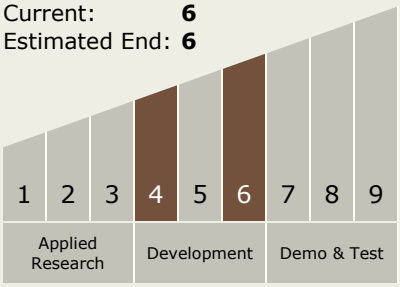
David K Baumann

Principal Investigator:

Daniel J Mollicone

Technology Maturity (TRL)

Start: **4**
Current: **6**
Estimated End: **6**



Develop of Software User Interface to Support Scenario Modeling of Astronaut Schedules to Aid in the Selection of Fatigue Countermeasures within Behavioral Health and Performance Dashboard (BHP-DS)

Completed Technology Project (2013 - 2014)

Technology Areas

Primary:

- TX06 Human Health, Life Support, and Habitation Systems
  - TX06.3 Human Health and Performance
    - TX06.3.3 Behavioral Health and Performance

Target Destinations

The Moon, Mars